APPENDIX E

AIR POLLUTION EMISSION CALCULATIONS

Table E-1. Emission Source Data for Onshore and State Waters Construction Activities - North Monterey Bay Landing Site - La Selva to Fort Ord (via Sand City).

Activity/Equipment Type	*Horsepower* (Hp)	*Load Factor*	*Number Active*	*Hp-Hrs*	*Gal/ Hour*	*Hours /Day*	*Work Days*	*Total Fuel Usage (Gal)*
Cable Laying into Existing Conduit (1)								
Winch-Mounted Truck	350	0.20	1	70	3.9	6	2	47
Cable Pulling Winch	80	0.50	1	40	4.4	4	2	36
Cable Trenching along Roads (2)								
Trencher-Mounted Truck	350	0.30	1	105	5.9	4	1.5	35
Vibratory Trencher	100	0.60	1	60	6.7	4	1.5	40
Fugitive Dust (3)	NA	NA	0.24	NA	NA	NA	1.5	0.4
Cable Hanging on Existing Utility Poles (4)								
Winch-Mounted Truck	350	0.20	1	70	3.9	6	22	517
Cable Pulling Winch	80	0.50	1	40	4.4	4	22	391
Caisson Construction/Land Trenching								
Backhoe	105	0.60	1	63	3.5	6	2	42
Supply Truck w/ Crane	250	0.30	1	75	4.2	2	1	8
Trencher-Mounted Truck	350	0.30	1	105	5.9	6	1	35
Vibratory Trencher	100	0.60	1	60	6.7	6	1	40
Shore Horizontal Directional Drilling								
Tracked Drill Rig	460	0.70	1	322	18.0	8	5	721
Drilling Mud Unit	550	0.60	1	330	18.5	8	5	739
Work/Dive Boat	340	0.30	1	102	5.7	12	2	137
Cable Landing to Shore								
Cable Lay Vessel - Main Engines	2,300	0.12	2	552	27.6	24	2	1,325
Cable Lay Vessel - Generator	1,290	0.25	1	323	16.8	24	2	805
Cable Lay Vessel - Generator	970	0.22	1	213	11.1	24	2	533
Barge Tugboat	1,300	0.40	Total Hp	520	29.1	12	2	699
Work/Dive Boat	340	0.30	1	102	5.7	12	2	137
Power Winch - Onshore	100	0.40	1	40	2.2	4	1	9
Offshore Cable Laying/Burying (5)								
Cable Lay Vessel - Main Engines	2,300	0.22	2	1,012	50.6	30	1	1,518
Cable Lay Vessel - Generator	1,290	0.25	1	323	16.8	30	1	503
Cable Lay Vessel - Generator	970	0.22	1	213	11.1	30	1	333
Vessel Return (6)								
Cable Lay Vessel - Main Engines	2,300	0.64	2	2,944	153.1	2.5	1	383
Cable Lay Vessel - Generator	970	0.44	1	427	22.2	2.5	1	55

Note: (1) Based on an installation rate of 4 miles/day and a total distance of 6.8 miles.

(2) Based on an installation rate of 0.8 miles/day and a total distance of 1.2 miles.

(3) Number active are the average daily acres disturbed on a continuous basis and total fuel usage is the total acres disturbed. The dime the average daily acres disturbed would be 0.1 mile x 20 feet.

(4) Based on an installation rate of 1 mile/day and a total distance of 21.7 miles.

(5) Based on a cruising speed of 1 knot and a cable route of 15 nautical miles within state waters.

(6) Based on 2 return trips, a cruising speed of 12 knots, and a cable route of 15 nm within state waters.

Table E-2. Emission Source Data for Onshore and State Waters Construction Activities - South Monterey Bay Landing Site - Fort Ord to San Jose (Monterey and San Benito Counties Only).

Activity/Equipment Type	*Horsepower* (Hp)	*Load Factor*	*Number Active*	*Hp-Hrs*	*Gal/ Hour*	*Hours /Day*	*Work Days*	*Total Fuel Usage (Gal)*
Cable Laying into Existing Conduit (1)								
Winch-Mounted Truck	350	0.20	1	70	3.9	6	9	212
Cable Pulling Winch	80	0.50	1	40	4.4	4	9	160
Cable Trenching along Roads (2)								
Trencher-Mounted Truck	350	0.30	1	105	5.9	4	1.5	35
Vibratory Trencher	100	0.60	1	60	6.7	4	1.5	40
Fugitive Dust (3)	NA	NA	0.24	NA	NA	NA	1.5	0.4
Cable Hanging on Existing Utility Poles (4)								
Winch-Mounted Truck	350	0.20	1	70	3.9	8	22	690
Cable Pulling Winch	80	0.50	1	40	4.4	8	22	781
Caisson Construction/Land Trenching								
Backhoe	105	0.60	1	63	3.5	6	2	42
Supply Truck w/ Crane	250	0.30	1	75	4.2	2	1	8
Trencher-Mounted Truck	350	0.30	1	105	5.9	6	1	35
Vibratory Trencher	100	0.60	1	60	6.7	6	1	40
Shore Horizontal Directional Drilling								
Tracked Drill Rig	460	0.70	1	322	18.0	8	5	721
Drilling Mud Sediment Remover	550	0.60	1	330	18.5	8	5	739
Work/Dive Boat	340	0.30	1	102	5.7	12	2	137
Cable Landing to Shore								
Cable Lay Vessel - Main Engines	2,300	0.12	2	552	27.6	24	2	1,325
Cable Lay Vessel - Generator	1,290	0.25	1	323	16.8	24	2	805
Cable Lay Vessel - Generator	970	0.22	1	213	11.1	24	2	533
Barge Tugboat	1,300	0.40	Total Hp	520	29.1	12	2	699
Work/Dive Boat	340	0.30	1	102	5.7	12	2	137
Power Winch - Onshore	100	0.40	1	40	2.2	4	1	9
Offshore Cable Laying/Burying (5)								
Cable Lay Vessel - Main Engines	2,300	0.22	2	1,012	50.6	38	1	1,923
Cable Lay Vessel - Generator	1,290	0.25	1	323	16.8	38	1	637
Cable Lay Vessel - Generator	970	0.22	1	213	11.1	38	1	422
Vessel Return (6)								
Cable Lay Vessel - Main Engines	2,300	0.64	2	2,944	153.1	3.2	1	490
Cable Lay Vessel - Generator	970	0.44	1	427	22.2	3.2	1	71

Note: (1) Based on an installation rate of 4 miles/day and a total distance of 35.2 miles. Includes route from Fort Ord to Santa Clara County bo

(2) Based on an installation rate of 0.8 miles/day and a total distance of 1.1 miles.

(3) Number active are the average daily acres disturbed on a continuous basis and total fuel usage is the total acres disturbed. The dime the average daily acres disturbed would be 0.1 mile x 20 feet.

(4) Based on an installation rate of 1 mile/day and a total distance of 7.5 miles.

(5) Based on a cruising speed of 1 knot and a cable route of 19 nautical miles within state waters.

(6) Based on 2 return trips, a cruising speed of 12 knots, and a cable route of 19 nm within state waters.

Table E-3. Emission Source Data for Onshore and State Waters Construction Activities - South Monterey Bay Alternative Landing Site - Point Lobos to San Jose (Monterey and San Benito Counties Only).

Activity/Equipment Type	*Horsepower* (Hp)	*Load Factor*	*Number Active*	*Hp-Hrs*	*Gal/ Hour*	*Hours /Day*	*Work Days*	*Total Fuel Usage (Gal)*
Cable Laying into Existing Conduit (1)								
Winch-Mounted Truck	350	0.20	1	70	3.9	3	9	106
Cable Pulling Winch	80	0.50	1	40	4.4	2	9	80
Cable Trenching along Roads (2)								
Trencher-Mounted Truck	350	0.30	1	105	5.9	2	2	24
Vibratory Trencher	100	0.60	1	60	6.7	2	2	27
Fugitive Dust (3)	NA	NA	0.24	NA	NA	NA	2	0.5
Cable Hanging on Existing Utility Poles (4)								
Winch-Mounted Truck	350	0.20	1	70	3.9	6	19	447
Cable Pulling Winch	80	0.50	1	40	4.4	4	19	337
Caisson Construction/Land Trenching								
Backhoe	105	0.60	1	63	3.5	6	2	42
Supply Truck w/ Crane	250	0.30	1	75	4.2	2	1	8
Trencher-Mounted Truck	350	0.30	1	105	5.9	6	1	35
Vibratory Trencher	100	0.60	1	60	6.7	6	1	40
Shore Horizontal Directional Drilling								
Tracked Drill Rig	460	0.70	1	322	18.0	8	5	721
Drilling Mud Sediment Remover	550	0.60	1	330	18.5	8	5	739
Work/Dive Boat	340	0.30	1	102	5.7	12	2	137
Cable Landing to Shore								
Cable Lay Vessel - Main Engines	2,300	0.12	2	552	27.6	24	2	1,325
Cable Lay Vessel - Generator	1,290	0.25	1	323	16.8	24	2	805
Cable Lay Vessel - Generator	970	0.22	1	213	11.1	24	2	533
Barge Tugboat	1,300	0.40	Total Hp	520	29.1	12	2	699
Work/Dive Boat	340	0.30	1	102	5.7	12	2	137
Power Winch - Onshore	100	0.40	1	40	2.2	4	1	9
Offshore Cable Laying/Burying (5)								
Cable Lay Vessel - Main Engines	2,300	0.22	2	1,012	50.6	16	1	810
Cable Lay Vessel - Generator	1,290	0.25	1	323	16.8	16	1	268
Cable Lay Vessel - Generator	970	0.22	1	213	11.1	16	1	178
Vessel Return (6)								
Cable Lay Vessel - Main Engines	2,300	0.64	2	2,944	153.1	1.4	1	214
Cable Lay Vessel - Generator	970	0.44	1	427	22.2	1.4	1	31

Note: (1) Based on an installation rate of 4 miles/day and a total distance of 35 miles. Includes route from Pt. Lobos to Santa Clara County bor

(2) Based on an installation rate of 0.8 miles/day and a total distance of 1.3 miles.

(3) Number active are the average daily acres disturbed on a continuous basis and total fuel usage is the total acres disturbed. The dime the average daily acres disturbed would be 0.1 mile x 20 feet.

(4) Based on an installation rate of 1 mile/day and a total distance of 18.8 miles.

(5) Based on a cruising speed of 1 knot and a cable route of 8 nautical miles within state waters.

(6) Based on 2 return trips, a cruising speed of 12 knots, and a cable route of 8 nm within state waters.

Table E-4. Emission Source Data for All Land Alt - MBUAPCD

Activity/Equipment Type	*Horsepower* (Hp)	*Load Factor*	*Number Active*	*Hp-Hrs*	*Gal/ Hour*	*Hours /Day*	*Work Days*	*Total Hp-Hrs*
Cable Laying into Existing Conduit (1)								
Winch-Mounted Truck	350	0.20	1	70	3.9	6	8	3,360
Cable Pulling Winch	80	0.50	1	40	4.4	4	8	1,280
Cable Trenching along Roads (2)								
Trencher-Mounted Truck	350	0.30	1	105	5.9	4	156	65,520
Vibratory Trencher	100	0.60	1	60	6.7	4	156	37,440
Fugitive Dust (3)	NA	NA	0.24	NA	NA	NA	156	37.4

Note: (1) Based on an installation rate of 4 miles/day and a total distance of 31 miles.

(2) Based on an installation rate of 0.8 miles/day and a total distance of 125 miles.

(3) Number active are the average daily acres disturbed on a continuous basis and total fuel usage is the total acres disturbed. The dime
the average daily acres disturbed would be 0.1 mile x 20 feet.

Table E-5. Emission Factors for Equipment Associated with Global Photon Project Installation Activities.

Equipment Type	*Fuel Type*	*Grams/Hp-Hr*							
		TOC	*ROC*	*CO*	*NOx*	*SO2*	*PM*	*PM10*	*Source*
Backhoe	G	8.9	8.1	198.0	4.8	0.0	0.1	0.1	(1)
Drill Rig/Mud Unit	D	1.4	1.3	3.0	14.0	0.9	1.0	1.0	(2)
Trencher	D	1.1	1.0	4.8	10.3	0.9	1.3	1.2	(1)
Truck s	D	1.1	1.0	2.8	9.6	0.9	0.8	0.8	(1)
Vessel Engines/Generators	D	19.8	19.0	57.0	419.0	75.0	9.0	8.8	(3)
Winch	G	9.4	8.6	199.0	5.2	0.3	0.3	0.3	(2)
Fugitive Dust	--	--	--	--	--	--	110.0	55.0	(4)

Notes: (1) Table 2-07 (EPA 1991).

(2) AP-42, Table 3.3-1, Vol I. (EPA 1996).

(3) Lloyd's Register of Shipping, London 1990, 1993, and 1995, units in pounds/1000 gallons. From Acurex Env. Corp. 1996.

(4) Fugitive Dust Background Document/Tech. Information Document for Best Available Control Measures (EPA 1992).

Units in pounds per acre-day.

Table E-6. Daily Emissions Associated with the North Monterey Bay Landing Site Installation Activities - Site - La Selva to Fort Ord (via Sand City).

	Pounds Per Day				
Activity/Equipment Type	*ROC*	*CO*	*NOx*	*SO2*	*PM10*
Cable Laying into Existing Conduit					
Winch-Mounted Truck	1.0	2.6	8.9	0.8	0.7
Cable Pulling Winch	3.0	70.2	1.8	0.1	0.1
Subtotal	**4.0**	**72.8**	**10.7**	**0.9**	**0.8**
Cable Trenching along Roads					
Trencher-Mounted Truck	1.0	2.6	8.9	0.8	0.7
Vibratory Trencher	0.5	2.5	5.4	0.5	0.7
Fugitive Dust	0.0	0.0	0.0	0.0	13.2
Subtotal	**1.5**	**5.1**	**14.3**	**1.3**	**14.6**
Cable Hanging on Existing Utility Poles					
Winch-Mounted Truck	1.0	2.6	8.9	0.8	0.7
Cable Pulling Winch	3.0	70.2	1.8	0.1	0.1
Subtotal	**4.0**	**72.8**	**10.7**	**0.9**	**0.8**
Caisson Construction/Land Trenching					
Backhoe	6.7	165.0	4.0	0.0	0.0
Supply Truck w/ Crane	0.3	0.9	3.2	0.3	0.3
Trencher-Mounted Truck	1.4	3.9	13.3	1.2	1.1
Vibratory Trencher	0.8	3.8	8.2	0.7	1.0
Subtotal	**9.3**	**173.6**	**28.7**	**2.2**	**2.4**
Shore Horizontal Directional Drilling					
Tracked Drill Rig	7.4	17.2	79.5	5.3	5.7
Drilling Mud Unit	7.5	17.6	81.5	5.4	5.8
Work/Dive Boat	1.3	3.9	28.7	5.1	0.6
Subtotal	**16.2**	**38.7**	**189.7**	**15.8**	**12.1**
Cable Landing to Shore					
Cable Lay Vessel - Main Engines	12.6	37.8	277.5	49.7	5.8
Cable Lay Vessel - Generator	7.6	22.9	168.6	30.2	3.5
Cable Lay Vessel - Generator	5.1	15.2	111.6	20.0	2.3
Barge Tugboat	6.6	19.9	146.4	26.2	3.1
Work/Dive Boat	1.3	3.9	28.7	5.1	0.6
Power Winch - Onshore	3.0	70.2	1.8	0.1	0.1
Subtotal	**36.3**	**169.9**	**734.7**	**131.3**	**15.5**
Offshore Cable Laying/Burying					
Cable Lay Vessel - Main Engines	28.8	86.5	636.0	113.9	13.4
Cable Lay Vessel - Generator	9.6	28.7	210.8	37.7	4.4
Cable Lay Vessel - Generator	6.3	19.0	139.5	25.0	2.9
Subtotal	**44.7**	**134.2**	**986.3**	**176.6**	**20.8**
Vessel Return					
Cable Lay Vessel - Main Engines	7.3	21.8	160.4	28.7	3.4
Cable Lay Vessel - Generator	1.1	3.2	23.2	4.2	0.5

Subtotal	**8.3**	**25.0**	**183.6**	**32.9**	**3.9**
MBUAPCD Daily Thresholds	**NA**	**NA**	**NA**	**NA**	**82**

Note: Peak daily emissions would occur during offshore cable laying/burying.

Table E-7. Daily Emissions Associated with the South Monterey Bay Landing Site Installation Activities - Fort Ord to San Jose (Monterey and San Benito Counties Only).

	Pounds Per Day				
Activity/Equipment Type	*ROC*	*CO*	*NOx*	*SO2*	*PM10*
Cable Laying into Existing Conduit					
Winch-Mounted Truck	1.0	2.6	8.9	0.8	0.7
Cable Pulling Winch	0.4	1.0	3.4	0.3	0.3
Subtotal	**1.3**	**3.6**	**12.3**	**1.1**	**1.0**
Cable Trenching along Roads					
Trencher-Mounted Truck	1.0	2.6	8.9	0.8	0.7
Vibratory Trencher	0.5	2.5	5.4	0.5	0.7
Fugitive Dust	0.0	0.0	0.0	0.0	13.2
Subtotal	**1.5**	**5.1**	**14.3**	**1.3**	**14.6**
Cable Hanging on Existing Utility Poles					
Winch-Mounted Truck	1.3	3.5	11.9	1.1	0.9
Cable Pulling Winch	6.0	140.4	3.6	0.2	0.2
Subtotal	**7.3**	**143.8**	**15.5**	**1.3**	**1.2**
Caisson Construction/Land Trenching					
Backhoe	6.7	165.0	4.0	0.0	0.0
Supply Truck w/ Crane	0.3	0.9	3.2	0.3	0.3
Trencher-Mounted Truck	1.4	3.9	13.3	1.2	1.1
Vibratory Trencher	0.8	3.8	8.2	0.7	1.0
Subtotal	**9.3**	**173.6**	**28.7**	**2.2**	**2.4**
Shore Horizontal Directional Drilling					
Tracked Drill Rig	7.4	17.2	79.5	5.3	5.7
Drilling Mud Unit	7.5	17.6	81.5	5.4	5.8
Work/Dive Boat	1.3	3.9	28.7	5.1	0.6
Subtotal	**16.2**	**38.7**	**189.7**	**15.8**	**12.1**
Cable Landing to Shore					
Cable Lay Vessel - Main Engines	12.6	37.8	277.5	49.7	5.8
Cable Lay Vessel - Generator	7.6	22.9	168.6	30.2	3.5
Cable Lay Vessel - Generator	5.1	15.2	111.6	20.0	2.3
Barge Tugboat	6.6	19.9	146.4	26.2	3.1
Work/Dive Boat	1.3	3.9	28.7	5.1	0.6
Power Winch - Onshore	3.0	70.2	1.8	0.1	0.1
Subtotal	**36.3**	**169.9**	**734.7**	**131.3**	**15.5**
Offshore Cable Laying/Burying					
Cable Lay Vessel - Main Engines	36.5	109.6	805.7	144.2	17.0
Cable Lay Vessel - Generator	12.1	36.3	267.0	47.8	5.6
Cable Lay Vessel - Generator	8.0	24.0	176.7	31.6	3.7
Subtotal	**56.7**	**170.0**	**1,249.3**	**223.6**	**26.3**
Vessel Return					
Cable Lay Vessel - Main Engines	9.3	27.9	205.3	36.7	4.3
Cable Lay Vessel - Generator	1.3	4.0	29.8	5.3	0.6
Subtotal	**10.7**	**32.0**	**235.0**	**42.1**	**4.9**

MBUAPCD Daily Thresholds	**NA**	**NA**	**NA**	**NA**	**82**

Note: Peak daily emissions would occur during offshore cable laying/burying.

Table E-8. Daily Emissions from the South Monterey Bay Alternative Landing Site Installation Activities - Point Lobos to San Jose (Monterey and San Benito Counties Only).

	Pounds Per Day				
Activity/Equipment Type	*ROC*	*CO*	*NOx*	*SO2*	*PM10*
Cable Laying into Existing Conduit					
Winch-Mounted Truck	0.5	1.3	4.4	0.4	0.4
Cable Pulling Winch	1.5	35.1	0.9	0.0	0.1
Subtotal	**2.0**	**36.4**	**5.4**	**0.5**	**0.4**
Cable Trenching along Roads					
Trencher-Mounted Truck	0.5	1.3	4.4	0.4	0.4
Vibratory Trencher	0.3	1.3	2.7	0.2	0.3
Fugitive Dust	0.0	0.0	0.0	26.4	13.2
Subtotal	**0.8**	**2.6**	**7.2**	**27.0**	**13.9**
Cable Hanging on Existing Utility Poles					
Winch-Mounted Truck	1.0	2.6	8.9	0.8	0.7
Cable Pulling Winch	3.0	70.2	1.8	0.1	0.1
Subtotal	**4.0**	**72.8**	**10.7**	**0.9**	**0.8**
Caisson Construction/Land Trenching					
Backhoe	6.7	165.0	4.0	0.0	0.0
Supply Truck w/ Crane	0.3	0.9	3.2	0.3	0.3
Trencher-Mounted Truck	1.4	3.9	13.3	1.2	1.1
Vibratory Trencher	0.8	3.8	8.2	0.7	1.0
Subtotal	**9.3**	**173.6**	**28.7**	**2.2**	**2.4**
Shore Horizontal Directional Drilling					
Tracked Drill Rig	7.4	17.2	79.5	5.3	5.7
Drilling Mud Unit	7.5	17.6	81.5	5.4	5.8
Work/Dive Boat	1.3	3.9	28.7	5.1	0.6
Subtotal	**16.2**	**38.7**	**189.7**	**15.8**	**12.1**
Cable Landing to Shore					
Cable Lay Vessel - Main Engines	12.6	37.8	277.5	49.7	5.8
Cable Lay Vessel - Generator	7.6	22.9	168.6	30.2	3.5
Cable Lay Vessel - Generator	5.1	15.2	111.6	20.0	2.3
Barge Tugboat	6.6	19.9	146.4	26.2	3.1
Work/Dive Boat	1.3	3.9	28.7	5.1	0.6
Power Winch - Onshore	3.0	70.2	1.8	0.1	0.1
Subtotal	**36.3**	**169.9**	**734.7**	**131.3**	**15.5**
Offshore Cable Laying/Burying					
Cable Lay Vessel - Main Engines	15.4	46.1	339.2	60.7	7.1
Cable Lay Vessel - Generator	5.1	15.3	112.4	20.1	2.4
Cable Lay Vessel - Generator	3.4	10.1	74.4	13.3	1.6
Subtotal	**23.9**	**71.6**	**526.0**	**94.2**	**11.1**
Vessel Return					
Cable Lay Vessel - Main Engines	4.1	12.2	89.8	16.1	1.9
Cable Lay Vessel - Generator	0.6	1.8	13.0	2.3	0.3
Subtotal	**4.7**	**14.0**	**102.8**	**18.4**	**2.2**

MBUAPCD Daily Thresholds	**NA**	**NA**	**NA**	**NA**	**82**

Note: Peak daily emissions would occur during offshore cable laying/burying.

Table E-9. Total Emissions Associated with the North Monterey Bay Landing Site Installation Activities - Site - La Selva to Fort Ord (via Sand City).

Activity/Equipment Type	*Pounds*				
	ROC	*CO*	*NOx*	*SO2*	*PM10*
Cable Laying into Existing Conduit					
Winch-Mounted Truck	1.9	5.2	17.8	1.6	1.4
Cable Pulling Winch	6.0	140.4	3.6	0.2	0.2
Subtotal	**8.0**	**145.6**	**21.4**	**1.8**	**1.7**
Cable Trenching along Roads					
Trencher-Mounted Truck	1.4	3.9	13.3	1.2	1.1
Vibratory Trencher	0.8	3.8	8.2	0.7	1.0
Fugitive Dust	0.0	0.0	0.0	0.0	19.8
Subtotal	**2.3**	**7.7**	**21.5**	**1.9**	**21.8**
Cable Hanging on Existing Utility Poles					
Winch-Mounted Truck	21.1	57.0	195.6	18.1	15.6
Cable Pulling Winch	66.4	1,544.3	40.0	2.1	2.5
Subtotal	**87.5**	**1,601.3**	**235.6**	**20.2**	**18.2**
Caisson Construction/Land Trenching					
Backhoe	13.4	330.0	8.0	0.0	0.1
Supply Truck w/ Crane	0.3	0.9	3.2	0.3	0.3
Trencher-Mounted Truck	1.4	3.9	13.3	1.2	1.1
Vibratory Trencher	0.8	3.8	8.2	0.7	1.0
Subtotal	**16.0**	**338.6**	**32.7**	**2.3**	**2.4**
Shore Horizontal Directional Drilling					
Tracked Drill Rig	36.8	86.0	397.5	26.4	28.4
Drilling Mud Unit	37.7	88.2	407.4	27.1	29.1
Work/Dive Boat	2.6	7.8	57.4	10.3	1.2
Subtotal	**77.1**	**182.0**	**862.4**	**63.8**	**58.7**
Cable Landing to Shore					
Cable Lay Vessel - Main Engines	25.2	75.5	555.1	99.4	11.7
Cable Lay Vessel - Generator	15.3	45.9	337.3	60.4	7.1
Cable Lay Vessel - Generator	10.1	30.4	223.2	39.9	4.7
Barge Tugboat	13.3	39.8	292.8	52.4	6.2
Work/Dive Boat	2.6	7.8	57.4	10.3	1.2
Power Winch - Onshore	3.0	70.2	1.8	0.1	0.1
Subtotal	**69.5**	**269.6**	**1,467.6**	**262.5**	**31.0**
Offshore Cable Laying/Burying					
Cable Lay Vessel - Main Engines	28.8	86.5	636.0	113.9	13.4
Cable Lay Vessel - Generator	9.6	28.7	210.8	37.7	4.4
Cable Lay Vessel - Generator	6.3	19.0	139.5	25.0	2.9
Subtotal	**44.7**	**134.2**	**986.3**	**176.6**	**20.8**
Vessel Return					
Cable Lay Vessel - Main Engines	7.3	21.8	160.4	28.7	3.4
Cable Lay Vessel - Generator	1.1	3.2	23.2	4.2	0.5

Subtotal	**8.3**	**25.0**	**183.6**	**32.9**	**3.9**
Total Emissions - Pounds	**313**	**2,704**	**3,811**	**562**	**158**
Total Emissions - Tons	**0.16**	**1.35**	**1.91**	**0.28**	**0.08**

Table E-10. Total Emissions Associated with the South Monterey Bay Landing Site Installation Activities - Fort Ord to San Jose (Monterey and San Benito Counties Only).

	Pounds				
Activity/Equipment Type	*ROC*	*CO*	*NOx*	*SO2*	*PM10*
Cable Laying into Existing Conduit					
Winch-Mounted Truck	8.6	23.3	80.0	7.4	6.4
Cable Pulling Winch	3.3	8.9	30.5	2.8	2.4
Subtotal	**11.9**	**32.2**	**110.5**	**10.2**	**8.8**
Cable Trenching along Roads					
Trencher-Mounted Truck	1.4	3.9	13.3	1.2	1.1
Vibratory Trencher	0.8	3.8	8.2	0.7	1.0
Fugitive Dust	0.0	0.0	0.0	0.0	19.8
Subtotal	**2.3**	**7.7**	**21.5**	**1.9**	**21.8**
Cable Hanging on Existing Utility Poles					
Winch-Mounted Truck	28.2	76.0	260.7	24.2	20.9
Cable Pulling Winch	132.8	3,088.5	80.1	4.2	5.0
Subtotal	**160.9**	**3,164.6**	**340.8**	**28.3**	**25.9**
Caisson Construction/Land Trenching					
Backhoe	13.4	330.0	8.0	0.0	0.1
Supply Truck w/ Crane	0.3	0.9	3.2	0.3	0.3
Trencher-Mounted Truck	1.4	3.9	13.3	1.2	1.1
Vibratory Trencher	0.8	3.8	8.2	0.7	1.0
Subtotal	**16.0**	**338.6**	**32.7**	**2.3**	**2.4**
Shore Horizontal Directional Drilling					
Tracked Drill Rig	36.8	86.0	397.5	26.4	11.7
Drilling Mud Unit	37.7	88.2	407.4	27.1	7.1
Work/Dive Boat	2.6	7.8	57.4	10.3	4.7
Subtotal	**77.1**	**182.0**	**862.4**	**63.8**	**23.5**
Cable Landing to Shore					
Cable Lay Vessel - Main Engines	25.2	75.5	555.1	99.4	11.7
Cable Lay Vessel - Generator	15.3	45.9	337.3	60.4	7.1
Cable Lay Vessel - Generator	10.1	30.4	223.2	39.9	4.7
Barge Tugboat	13.3	39.8	292.8	52.4	6.2
Work/Dive Boat	2.6	7.8	57.4	10.3	1.2
Power Winch - Onshore	3.0	70.2	1.8	0.1	0.1
Subtotal	**69.5**	**269.6**	**1,467.6**	**262.5**	**31.0**
Offshore Cable Laying/Burying					
Cable Lay Vessel - Main Engines	36.5	109.6	805.7	144.2	17.0
Cable Lay Vessel - Generator	12.1	36.3	267.0	47.8	5.6
Cable Lay Vessel - Generator	8.0	24.0	176.7	31.6	3.7
Subtotal	**56.7**	**170.0**	**1,249.3**	**223.6**	**26.3**
Vessel Return					
Cable Lay Vessel - Main Engines	9.3	27.9	205.3	36.7	4.3
Cable Lay Vessel - Generator	1.3	4.0	29.8	5.3	0.6
Subtotal	**10.7**	**32.0**	**235.0**	**42.1**	**4.9**

Total Emissions - Pounds	**405**	**4,197**	**4,320**	**635**	**145**
Total Emissions - Tons	**0.20**	**2.10**	**2.16**	**0.32**	**0.07**

Table E-11. Total Emissions Associated with the South Monterey Bay Alternative Landing Site Installatio Activities - Point Lobos to San Jose (Monterey and San Benito Counties Only).

	Pounds				
Activity/Equipment Type	*ROC*	*CO*	*NOx*	*SO2*	*PM10*
Cable Laying into Existing Conduit					
Winch-Mounted Truck	4.3	11.7	40.0	3.7	3.2
Cable Pulling Winch	13.6	315.9	8.2	0.4	0.5
Subtotal	**17.9**	**327.5**	**48.2**	**4.1**	**3.7**
Cable Trenching along Roads					
Trencher-Mounted Truck	1.0	2.6	8.9	0.8	0.7
Vibratory Trencher	0.5	2.5	5.4	0.5	0.7
Fugitive Dust	0.0	0.0	0.0	52.8	26.4
Subtotal	**1.5**	**5.1**	**14.3**	**54.1**	**27.8**
Cable Hanging on Existing Utility Poles					
Winch-Mounted Truck	18.2	49.3	168.9	15.7	13.5
Cable Pulling Winch	57.3	1,333.7	34.6	1.8	2.2
Subtotal	**75.6**	**1,382.9**	**203.5**	**17.5**	**15.7**
Caisson Construction/Land Trenching					
Backhoe	13.4	330.0	8.0	0.0	0.1
Supply Truck w/ Crane	0.3	0.9	3.2	0.3	0.3
Trencher-Mounted Truck	1.4	3.9	13.3	1.2	1.1
Vibratory Trencher	0.8	3.8	8.2	0.7	1.0
Subtotal	**16.0**	**338.6**	**32.7**	**2.3**	**2.4**
Shore Horizontal Directional Drilling					
Tracked Drill Rig	36.8	86.0	397.5	26.4	28.4
Drilling Mud Unit	37.7	88.2	407.4	27.1	29.1
Work/Dive Boat	2.6	7.8	57.4	10.3	1.2
Subtotal	**77.1**	**182.0**	**862.4**	**63.8**	**58.7**
Cable Landing to Shore					
Cable Lay Vessel - Main Engines	25.2	75.5	555.1	99.4	11.7
Cable Lay Vessel - Generator	15.3	45.9	337.3	60.4	7.1
Cable Lay Vessel - Generator	10.1	30.4	223.2	39.9	4.7
Barge Tugboat	13.3	39.8	292.8	52.4	6.2
Work/Dive Boat	2.6	7.8	57.4	10.3	1.2
Power Winch - Onshore	3.0	70.2	1.8	0.1	0.1
Subtotal	**69.5**	**269.6**	**1,467.6**	**262.5**	**31.0**
Offshore Cable Laying/Burying					
Cable Lay Vessel - Main Engines	15.4	46.1	339.2	60.7	7.1
Cable Lay Vessel - Generator	5.1	15.3	112.4	20.1	2.4
Cable Lay Vessel - Generator	3.4	10.1	74.4	13.3	1.6
Subtotal	**23.9**	**71.6**	**526.0**	**94.2**	**11.1**
Vessel Return					
Cable Lay Vessel - Main Engines	4.1	12.2	89.8	16.1	1.9
Cable Lay Vessel - Generator	0.6	1.8	13.0	2.3	0.3
Subtotal	**4.7**	**14.0**	**102.8**	**18.4**	**2.2**

Total Emissions - Pounds	**286**	**2,591**	**3,258**	**517**	**152**
Total Emissions - Tons	**0.14**	**1.30**	**1.63**	**0.26**	**0.08**

Table E-12. Total Emissions - All Land Alt - MBUAPCD

Activity/Equipment Type	*Tons*				
	ROC	*CO*	*NOx*	*SO2*	*PM10*
Cable Laying into Existing Conduit					
Winch-Mounted Truck	0.0	0.0	0.0	0.0	0.0
Cable Pulling Winch	0.0	0.3	0.0	0.0	0.0
Subtotal	**0.0**	**0.3**	**0.0**	**0.0**	**0.0**
Cable Trenching along Roads					
Trencher-Mounted Truck	0.1	0.2	0.7	0.1	0.1
Vibratory Trencher	0.0	0.2	0.4	0.0	0.1
Fugitive Dust	0.0	0.0	0.0	0.0	1.0
Subtotal	**0.1**	**0.4**	**1.1**	**0.1**	**1.1**
Total Emissions - Tons	**0.13**	**0.69**	**1.16**	**0.10**	**1.14**

Table E-13. Emission Source Data for Proposed Onshore and State Waters Construction Activities - Estero Bay Primary Landing Site to San Luis Obispo.

Activity/Equipment Type	*Horsepower* (Hp)	*Load Factor*	*Number Active*	*Hp-Hrs*	*Gal/ Hour*	*Hours /Day*	*Work Days*	*Total Fuel Usage (Gal)*
Cable Laying into Existing Conduit (1)								
Winch-Mounted Truck	350	0.20	1	70	3.9	6	4	94
Cable Pulling Winch	80	0.50	1	40	4.4	4	4	71
Cable Trenching along Roads (2)								
Trencher-Mounted Truck	350	0.30	1	105	5.9	8	5	235
Vibratory Trencher	100	0.60	1	60	6.7	8	5	266
Fugitive Dust (3)	NA	NA	0.24	NA	NA	NA	5	1
Cable Hanging on Existing Utility Poles (4)								
Winch-Mounted Truck	350	0.20	1	70	3.9	6	14	329
Cable Pulling Winch	80	0.50	1	40	4.4	4	14	249
Caisson Construction								
Backhoe	105	0.60	1	63	3.5	6	2	42
Supply Truck w/ Crane	250	0.30	1	75	4.2	2	1	8
Shore Horizontal Directional Drilling								
Tracked Drill Rig	460	0.70	1	322	18.0	8	5	721
Drilling Mud Unit	550	0.60	1	330	18.5	8	5	739
Work/Dive Boat	340	0.30	1	102	5.7	12	2	137
Cable Landing to Shore								
Cable Lay Vessel - Main Engines	2,300	0.12	2	552	27.6	24	2	1,325
Cable Lay Vessel - Generator	1,290	0.25	1	323	16.8	24	2	805
Cable Lay Vessel - Generator	970	0.22	1	213	11.1	24	2	533
Barge Tugboat	1,300	0.40	Total Hp	520	29.1	12	2	699
Work/Dive Boat	340	0.30	1	102	5.7	12	2	137
Power Winch - Onshore	100	0.40	1	40	2.2	4	1	9
Offshore Cable Laying/Burying (5)								
Cable Lay Vessel - Main Engines	2,300	0.22	2	1,012	50.6	24	1	1,214
Cable Lay Vessel - Generator	1,290	0.25	1	323	16.8	24	1	402
Cable Lay Vessel - Generator	970	0.22	1	213	11.1	24	1	266
Vessel Return (6)								
Cable Lay Vessel - Main Engines	2,300	0.64	2	2,944	153.1	2.0	1	306
Cable Lay Vessel - Generator	970	0.44	1	427	22.2	2.0	1	44

Note: (1) Based on an installation rate of 4 miles/day and a total distance of 14.9 miles.

(2) Based on an installation rate of 0.8 miles/day and a total distance of 4.1 miles.

(3) Number active are the average daily acres disturbed on a continuous basis and total fuel usage is the total acres disturbed. The dim the average daily acres disturbed would be 0.1 mile x 20 feet.

(4) Based on an installation rate of 1 mile/day and a total distance of 14.0 miles.

(5) Based on a cruising speed of 1 knot and a cable route of 12 nautical miles within state waters.

(6) Based on 2 return trips, a cruising speed of 12 knots, and a cable route of 12 nm within state waters.

Table E-14. Emission Source Data for Proposed Onshore and State Waters Construction Activities - Estero Bay Cayucos Alternative Landing Site to San Luis Obispo.

Activity/Equipment Type	*Horsepower* (Hp)	*Load Factor*	*Number Active*	*Hp-Hrs*	*Gal/ Hour*	*Hours /Day*	*Work Days*	*Total Fuel Usage (Gal)*
Cable Laying into Existing Conduit (1)								
Winch-Mounted Truck	350	0.20	1	70	3.9	6	5	118
Cable Pulling Winch	80	0.50	1	40	4.4	4	5	89
Cable Trenching along Roads (2)								
Trencher-Mounted Truck	350	0.30	1	105	5.9	8	5	235
Vibratory Trencher	100	0.60	1	60	6.7	8	5	266
Fugitive Dust (3)	NA	NA	0.24	NA	NA	NA	5	1
Cable Hanging on Existing Utility Poles (4)								
Winch-Mounted Truck	350	0.20	1	70	3.9	6	14	329
Cable Pulling Winch	80	0.50	1	40	4.4	4	14	249
Caisson Construction								
Backhoe	105	0.60	1	63	3.5	6	2	42
Supply Truck w/ Crane	250	0.30	1	75	4.2	2	1	8
Shore Horizontal Directional Drilling								
Tracked Drill Rig	460	0.70	1	322	18.0	8	5	721
Drilling Mud Unit	550	0.60	1	330	18.5	8	5	739
Work/Dive Boat	340	0.30	1	102	5.7	12	2	137
Cable Landing to Shore								
Cable Lay Vessel - Main Engines	2,300	0.12	2	552	27.6	24	2	1,325
Cable Lay Vessel - Generator	1,290	0.25	1	323	16.8	24	2	805
Cable Lay Vessel - Generator	970	0.22	1	213	11.1	24	2	533
Barge Tugboat	1,300	0.40	Total Hp	520	29.1	12	2	699
Work/Dive Boat	340	0.30	1	102	5.7	12	2	137
Power Winch - Onshore	100	0.40	1	40	2.2	4	1	9
Offshore Cable Laying/Burying (5)								
Cable Lay Vessel - Main Engines	2,300	0.22	2	1,012	50.6	24	1.2	1,457
Cable Lay Vessel - Generator	1,290	0.25	1	323	16.8	24	1.2	483
Cable Lay Vessel - Generator	970	0.22	1	213	11.1	24	1.2	320
Vessel Return (6)								
Cable Lay Vessel - Main Engines	2,300	0.64	2	2,944	153.1	2.4	1	367
Cable Lay Vessel - Generator	970	0.44	1	427	22.2	2.4	1	53

Note: (1) Based on an installation rate of 4 miles/day and a total distance of 18.5 miles.

(2) Based on an installation rate of 0.8 miles/day and a total distance of 4.1 miles.

(3) Number active are the average daily acres disturbed on a continuous basis and total fuel usage is the total acres disturbed. The dim the average daily acres disturbed would be 0.1 mile x 20 feet.

(4) Based on an installation rate of 1 mile/day and a total distance of 14.0 miles.

(5) Based on a cruising speed of 1 knot and a cable route of 14 nautical miles within state waters (worst-case distance).

(6) Based on 2 return trips, a cruising speed of 12 knots, and a cable route of 14 nm within state waters.

Table E-15. Emission Source Data for Proposed Onshore and State Waters Construction Activities - Estero Bay Morro Beach Alternative Landing Site to San Luis Obispo.

Activity/Equipment Type	*Horsepower* (Hp)	*Load Factor*	*Number Active*	*Hp-Hrs*	*Gal/ Hour*	*Hours /Day*	*Work Days*	*Total Fuel Usage (Gal)*
Cable Laying from Beach to Existing Conduit								
Skip-borer	200	0.60	1	120	6.7	8	3.0	161
Cable Laying into Existing Conduit (1)								
Winch-Mounted Truck	350	0.20	1	70	3.9	6	5	118
Cable Pulling Winch	80	0.50	1	40	4.4	4	5	89
Cable Trenching along Roads (2)								
Trencher-Mounted Truck	350	0.30	1	105	5.9	8	5	235
Vibratory Trencher	100	0.60	1	60	6.7	8	5	266
Fugitive Dust (3)	NA	NA	0.24	NA	NA	NA	5	1
Cable Hanging on Existing Utility Poles (4)								
Winch-Mounted Truck	350	0.20	1	70	3.9	6	14	329
Cable Pulling Winch	80	0.50	1	40	4.4	4	14	249
Caisson Construction								
Backhoe	105	0.60	1	63	3.5	6	2	42
Supply Truck w/ Crane	250	0.30	1	75	4.2	2	1	8
Shore Horizontal Directional Drilling								
Tracked Drill Rig	460	0.70	1	322	18.0	8	5	721
Drilling Mud Unit	550	0.60	1	330	18.5	8	5	739
Work/Dive Boat	340	0.30	1	102	5.7	12	2	137
Cable Landing to Shore								
Cable Lay Vessel - Main Engines	2,300	0.12	2	552	27.6	24	2	1,325
Cable Lay Vessel - Generator	1,290	0.25	1	323	16.8	24	2	805
Cable Lay Vessel - Generator	970	0.22	1	213	11.1	24	2	533
Barge Tugboat	1,300	0.40	Total Hp	520	29.1	12	2	699
Work/Dive Boat	340	0.30	1	102	5.7	12	2	137
Power Winch - Onshore	100	0.40	1	40	2.2	4	1	9
Offshore Cable Laying/Burying (5)								
Cable Lay Vessel - Main Engines	2,300	0.22	2	1,012	50.6	24	1	1,214
Cable Lay Vessel - Generator	1,290	0.25	1	323	16.8	24	1	402
Cable Lay Vessel - Generator	970	0.22	1	213	11.1	24	1	266
Vessel Return (6)								
Cable Lay Vessel - Main Engines	2,300	0.64	2	2,944	153.1	2.0	1	306
Cable Lay Vessel - Generator	970	0.44	1	427	22.2	2.0	1	44

Note: (1) Based on an installation rate of 4 miles/day and a total distance of 18.1 miles.

(2) Based on an installation rate of 0.8 miles/day and a total distance of 4.1 miles.

(3) Number active are the average daily acres disturbed on a continuous basis and total fuel usage is the total acres disturbed. The dim the average daily acres disturbed would be 0.1 mile x 20 feet.

(4) Based on an installation rate of 1 mile/day and a total distance of 14.0 miles.

(5) Based on a cruising speed of 1 knot and a cable route of 12 nautical miles within state waters.

(6) Based on 2 return trips, a cruising speed of 12 knots, and a cable route of 12 nm within state waters.

Table E-16. Emission Source Data for All Land Alt - MBUAPCD

Activity/Equipment Type	*Horsepower* (Hp)	*Load Factor*	*Number Active*	*Hp-Hrs*	*Gal/ Hour*	*Hours /Day*	*Work Days*	*Total Hp-Hrs*
Cable Laying into Existing Conduit (1)								
Winch-Mounted Truck	350	0.20	1	70	3.9	6	3	1,260
Cable Pulling Winch	80	0.50	1	40	4.4	4	3	480
Cable Trenching along Roads (2)								
Trencher-Mounted Truck	350	0.30	1	105	5.9	4	58	24,360
Vibratory Trencher	100	0.60	1	60	6.7	4	58	13,920
Fugitive Dust (3)	NA	NA	0.24	NA	NA	NA	58	13.9

Note: (1) Based on an installation rate of 4 miles/day and a total distance of 12 miles.

(2) Based on an installation rate of 0.8 miles/day and a total distance of 46 miles.

(3) Number active are the average daily acres disturbed on a continuous basis and total fuel usage is the total acres disturbed. The dim
the average daily acres disturbed would be 0.1 mile x 20 feet.

Table E-17. Daily Emissions Associated with the Estero Bay Primary Landing Site to San Luis Obispo Installation Activities.

Activity/Equipment Type	*Pounds Per Day*				
	ROC	*CO*	*NOx*	*SO2*	*PM10*
Cable Laying into Existing Conduit					
Winch-Mounted Truck	1.0	2.6	8.9	0.8	0.7
Cable Pulling Winch	3.0	70.2	1.8	0.1	0.1
Subtotal	**4.0**	**72.8**	**10.7**	**0.9**	**0.8**
Cable Trenching along Roads					
Trencher-Mounted Truck	1.9	5.2	17.8	1.6	1.4
Vibratory Trencher	1.1	5.1	10.9	0.9	1.3
Fugitive Dust	0.0	0.0	0.0	0.0	13.2
Subtotal	**3.0**	**10.3**	**28.7**	**2.6**	**15.9**
Cable Hanging on Existing Utility Poles					
Winch-Mounted Truck	1.0	2.6	8.9	0.8	0.7
Cable Pulling Winch	3.0	70.2	1.8	0.1	0.1
Subtotal	**4.0**	**72.8**	**10.7**	**0.9**	**0.8**
Caisson Construction					
Backhoe	6.7	165.0	4.0	0.0	0.0
Supply Truck w/ Crane	0.3	0.9	3.2	0.3	0.3
Subtotal	**7.1**	**165.9**	**7.2**	**0.3**	**0.3**
Shore Horizontal Directional Drilling					
Tracked Drill Rig	7.4	17.2	79.5	5.3	5.7
Drilling Mud Unit	7.5	17.6	81.5	5.4	5.8
Work/Dive Boat	1.3	3.9	28.7	5.1	0.6
Subtotal	**16.2**	**38.7**	**189.7**	**15.8**	**12.1**
Cable Landing to Shore					
Cable Lay Vessel - Main Engines	12.6	37.8	277.5	49.7	5.8
Cable Lay Vessel - Generator	7.6	22.9	168.6	30.2	3.5
Cable Lay Vessel - Generator	5.1	15.2	111.6	20.0	2.3
Barge Tugboat	6.6	19.9	146.4	26.2	3.1
Work/Dive Boat	1.3	3.9	28.7	5.1	0.6
Power Winch - Onshore	3.0	70.2	1.8	0.1	0.1
Subtotal	**36.3**	**169.9**	**734.7**	**131.3**	**15.5**
Offshore Cable Laying/Burying					
Cable Lay Vessel - Main Engines	23.1	69.2	508.8	91.1	10.7
Cable Lay Vessel - Generator	7.6	22.9	168.6	30.2	3.5
Cable Lay Vessel - Generator	5.1	15.2	111.6	20.0	2.3
Subtotal	**35.8**	**107.3**	**789.1**	**141.2**	**16.6**
Vessel Return					
Cable Lay Vessel - Main Engines	5.8	17.5	128.3	23.0	2.7
Cable Lay Vessel - Generator	0.8	2.5	18.6	3.3	0.4
Subtotal	**6.7**	**20.0**	**146.9**	**26.3**	**3.1**
SLOCAPCD Daily Thresholds	**185**	**NA**	**185**	**NA**	**NA**

Note: Peak daily emissions would occur during offshore cable laying/burying. Use of 2 degree ITR and ARB on-road diese
on all diesel-powered vessels and equipment would reduce ROC/NOx emissions by 16/15%.

Table E-18. Daily Emissions from the Estero Bay Cayucos Alternative Landing Site to San Luis Obispo Installation Activities.

Activity/Equipment Type	*Pounds Per Day*				
	ROC	*CO*	*NOx*	*SO2*	*PM10*
Cable Laying into Existing Conduit					
Winch-Mounted Truck	1.0	2.6	8.9	0.8	0.7
Cable Pulling Winch	3.0	70.2	1.8	0.1	0.1
Subtotal	**4.0**	**72.8**	**10.7**	**0.9**	**0.8**
Cable Trenching along Roads					
Trencher-Mounted Truck	1.9	5.2	17.8	1.6	1.4
Vibratory Trencher	1.1	5.1	10.9	0.9	1.3
Fugitive Dust	0.0	0.0	0.0	0.0	13.2
Subtotal	**3.0**	**10.3**	**28.7**	**2.6**	**15.9**
Cable Hanging on Existing Utility Poles					
Winch-Mounted Truck	1.0	2.6	8.9	0.8	0.7
Cable Pulling Winch	3.0	70.2	1.8	0.1	0.1
Subtotal	**4.0**	**72.8**	**10.7**	**0.9**	**0.8**
Caisson Construction					
Backhoe	6.7	165.0	4.0	0.0	0.0
Supply Truck w/ Crane	0.3	0.9	3.2	0.3	0.3
Subtotal	**7.1**	**165.9**	**7.2**	**0.3**	**0.3**
Shore Horizontal Directional Drilling					
Tracked Drill Rig	7.4	17.2	79.5	5.3	5.7
Drilling Mud Unit	7.5	17.6	81.5	5.4	5.8
Work/Dive Boat	1.3	3.9	28.7	5.1	0.6
Subtotal	**16.2**	**38.7**	**189.7**	**15.8**	**12.1**
Cable Landing to Shore					
Cable Lay Vessel - Main Engines	12.6	37.8	277.5	49.7	5.8
Cable Lay Vessel - Generator	7.6	22.9	168.6	30.2	3.5
Cable Lay Vessel - Generator	5.1	15.2	111.6	20.0	2.3
Barge Tugboat	6.6	19.9	146.4	26.2	3.1
Work/Dive Boat	1.3	3.9	28.7	5.1	0.6
Power Winch - Onshore	3.0	70.2	1.8	0.1	0.1
Subtotal	**36.3**	**169.9**	**734.7**	**131.3**	**15.5**
Offshore Cable Laying/Burying					
Cable Lay Vessel - Main Engines	23.1	69.2	508.8	91.1	10.7
Cable Lay Vessel - Generator	7.6	22.9	168.6	30.2	3.5
Cable Lay Vessel - Generator	5.1	15.2	111.6	20.0	2.3
Subtotal	**35.8**	**107.3**	**789.1**	**141.2**	**16.6**
Vessel Return					
Cable Lay Vessel - Main Engines	7.0	20.9	153.9	27.6	3.2
Cable Lay Vessel - Generator	1.0	3.0	22.3	4.0	0.5
Subtotal	**8.0**	**24.0**	**176.3**	**31.6**	**3.7**
SLOCAPCD Daily Thresholds	**185**	**NA**	**185**	**NA**	**NA**

Note: Peak daily emissions would occur during offshore cable laying/burying. Use of 2 degree ITR and ARB on-road diese
on all diesel-powered vessels and equipment would reduce ROC/NOx emissions by 16/15%.

Table E-19. Daily Emissions Associated with the Estero Bay Morro Beach Alternative Landing Site to San Luis Obispo Installation Activities.

	Pounds Per Day				
Activity/Equipment Type	*ROC*	*CO*	*NOx*	*SO2*	*PM10*
Cable Laying from Caisson to Existing Conduit					
Skip-borer	2.7	6.4	29.6	2.0	2.1
Cable Laying into Existing Conduit					
Winch-Mounted Truck	1.0	2.6	8.9	0.8	0.7
Cable Pulling Winch	3.0	70.2	1.8	0.1	0.1
Subtotal	**4.0**	**72.8**	**10.7**	**0.9**	**0.8**
Cable Trenching along Roads					
Trencher-Mounted Truck	1.9	5.2	17.8	1.6	1.4
Vibratory Trencher	1.1	5.1	10.9	0.9	1.3
Fugitive Dust	0.0	0.0	0.0	0.0	13.2
Subtotal	**3.0**	**10.3**	**28.7**	**2.6**	**15.9**
Cable Hanging on Existing Utility Poles					
Winch-Mounted Truck	1.0	2.6	8.9	0.8	0.7
Cable Pulling Winch	3.0	70.2	1.8	0.1	0.1
Subtotal	**4.0**	**72.8**	**10.7**	**0.9**	**0.8**
Caisson Construction					
Backhoe	6.7	165.0	4.0	0.0	0.0
Supply Truck w/ Crane	0.3	0.9	3.2	0.3	0.3
Subtotal	**7.1**	**165.9**	**7.2**	**0.3**	**0.3**
Shore Horizontal Directional Drilling					
Tracked Drill Rig	7.4	17.2	79.5	5.3	5.7
Drilling Mud Unit	7.5	17.6	81.5	5.4	5.8
Work/Dive Boat	1.3	3.9	28.7	5.1	0.6
Subtotal	**16.2**	**38.7**	**189.7**	**15.8**	**12.1**
Cable Landing to Shore					
Cable Lay Vessel - Main Engines	12.6	37.8	277.5	49.7	5.8
Cable Lay Vessel - Generator	7.6	22.9	168.6	30.2	3.5
Cable Lay Vessel - Generator	5.1	15.2	111.6	20.0	2.3
Barge Tugboat	6.6	19.9	146.4	26.2	3.1
Work/Dive Boat	1.3	3.9	28.7	5.1	0.6
Power Winch - Onshore	3.0	70.2	1.8	0.1	0.1
Subtotal	**36.3**	**169.9**	**734.7**	**131.3**	**15.5**
Offshore Cable Laying/Burying					
Cable Lay Vessel - Main Engines	23.1	69.2	508.8	91.1	10.7
Cable Lay Vessel - Generator	7.6	22.9	168.6	30.2	3.5
Cable Lay Vessel - Generator	5.1	15.2	111.6	20.0	2.3
Subtotal	**35.8**	**107.3**	**789.1**	**141.2**	**16.6**
Vessel Return					
Cable Lay Vessel - Main Engines	5.8	17.5	128.3	23.0	2.7
Cable Lay Vessel - Generator	0.8	2.5	18.6	3.3	0.4
Subtotal	**6.7**	**20.0**	**146.9**	**26.3**	**3.1**

SLOCAPCD Daily Thresholds	**185**	**NA**	**185**	**NA**	**NA**

Note: Peak daily emissions would occur during offshore cable laying/burying. Use of 2 degree ITR and ARB on-road diese
on all diesel-powered vessels and equipment would reduce ROC/NOx emissions by 16/15%.

Table E-20. Total Emissions Associated with the Estero Bay Primary Landing Site to San Luis Obispo Installation Activities.

	Pounds				
Activity/Equipment Type	*ROC*	*CO*	*NOx*	*SO2*	*PM10*
Cable Laying into Existing Conduit					
Winch-Mounted Truck	3.8	10.4	35.6	3.3	2.8
Cable Pulling Winch	12.1	280.8	7.3	0.4	0.5
Subtotal	**15.9**	**291.1**	**42.8**	**3.7**	**3.3**
Cable Trenching along Roads					
Trencher-Mounted Truck	9.6	25.9	88.9	8.2	7.1
Vibratory Trencher	5.4	25.4	54.5	4.6	6.6
Fugitive Dust	0.0	0.0	0.0	0.0	66.0
Subtotal	**15.0**	**51.3**	**143.4**	**12.8**	**79.7**
Cable Hanging on Existing Utility Poles					
Winch-Mounted Truck	13.4	36.3	124.4	11.5	10.0
Cable Pulling Winch	42.2	982.7	25.5	1.3	1.6
Subtotal	**55.7**	**1,019.0**	**149.9**	**12.9**	**11.6**
Caisson Construction					
Backhoe	13.4	330.0	8.0	0.0	0.1
Supply Truck w/ Crane	0.3	0.9	3.2	0.3	0.3
Subtotal	**13.8**	**330.9**	**11.2**	**0.3**	**0.4**
Shore Horizontal Directional Drilling					
Tracked Drill Rig	36.8	86.0	397.5	26.4	28.4
Drilling Mud Unit	37.7	88.2	407.4	27.1	29.1
Work/Dive Boat	2.6	7.8	57.4	10.3	1.2
Subtotal	**77.1**	**182.0**	**862.4**	**63.8**	**58.7**
Cable Landing to Shore					
Cable Lay Vessel - Main Engines	25.2	75.5	555.1	99.4	11.7
Cable Lay Vessel - Generator	15.3	45.9	337.3	60.4	7.1
Cable Lay Vessel - Generator	10.1	30.4	223.2	39.9	4.7
Barge Tugboat	13.3	39.8	292.8	52.4	6.2
Work/Dive Boat	2.6	7.8	57.4	10.3	1.2
Power Winch - Onshore	3.0	70.2	1.8	0.1	0.1
Subtotal	**69.5**	**269.6**	**1,467.6**	**262.5**	**31.0**
Offshore Cable Laying/Burying					
Cable Lay Vessel - Main Engines	23.1	69.2	508.8	91.1	10.7
Cable Lay Vessel - Generator	7.6	22.9	168.6	30.2	3.5
Cable Lay Vessel - Generator	5.1	15.2	111.6	20.0	2.3
Subtotal	**35.8**	**107.3**	**789.1**	**141.2**	**16.6**
Vessel Return					
Cable Lay Vessel - Main Engines	5.8	17.5	128.3	23.0	2.7
Cable Lay Vessel - Generator	0.8	2.5	18.6	3.3	0.4
Subtotal	**6.7**	**20.0**	**146.9**	**26.3**	**3.1**
Total Emissions - Pounds	**289**	**2,271**	**3,613**	**523**	**204**

Total Emissions - Tons	**0.14**	**1.14**	**1.81**	**0.26**	**0.10**
Mitigated Total Emissions - Tons (1)	**0.12**	**1.14**	**1.54**	**0.26**	**0.10**
SLOCAPCD Quarterly Thresholds - Tons	**2.50**	**NA**	**2.50**	**NA**	**NA**

Note: (1) Includes use of 2 degree ITR and ARB on-road diesel fuel on all diesel-powered vessels and equipment.

Table E-21. Total Emissions Associated with the Estero Bay Cayucos Alternative Landing Site to San Luis Obispo Installation Activities.

	Pounds				
Activity/Equipment Type	*ROC*	*CO*	*NOx*	*SO2*	*PM10*
Cable Laying into Existing Conduit					
Winch-Mounted Truck	4.8	13.0	44.4	4.1	3.6
Cable Pulling Winch	15.1	351.0	9.1	0.5	0.6
Subtotal	**19.9**	**363.9**	**53.5**	**4.6**	**4.1**
Cable Trenching along Roads					
Trencher-Mounted Truck	9.6	25.9	88.9	8.2	7.1
Vibratory Trencher	5.4	25.4	54.5	4.6	6.6
Fugitive Dust	0.0	0.0	0.0	0.0	66.0
Subtotal	**15.0**	**51.3**	**143.4**	**12.8**	**79.7**
Cable Hanging on Existing Utility Poles					
Winch-Mounted Truck	13.4	36.3	124.4	11.5	10.0
Cable Pulling Winch	42.2	982.7	25.5	1.3	1.6
Subtotal	**55.7**	**1,019.0**	**149.9**	**12.9**	**11.6**
Caisson Construction					
Backhoe	13.4	330.0	8.0	0.0	0.1
Supply Truck w/ Crane	0.3	0.9	3.2	0.3	0.3
Subtotal	**13.8**	**330.9**	**11.2**	**0.3**	**0.4**
Shore Horizontal Directional Drilling					
Tracked Drill Rig	36.8	86.0	397.5	26.4	28.4
Drilling Mud Unit	37.7	88.2	407.4	27.1	29.1
Work/Dive Boat	2.6	7.8	57.4	10.3	1.2
Subtotal	**77.1**	**182.0**	**862.4**	**63.8**	**58.7**
Cable Landing to Shore					
Cable Lay Vessel - Main Engines	25.2	75.5	555.1	99.4	11.7
Cable Lay Vessel - Generator	15.3	45.9	337.3	60.4	7.1
Cable Lay Vessel - Generator	10.1	30.4	223.2	39.9	4.7
Barge Tugboat	13.3	39.8	292.8	52.4	6.2
Work/Dive Boat	2.6	7.8	57.4	10.3	1.2
Power Winch - Onshore	3.0	70.2	1.8	0.1	0.1
Subtotal	**69.5**	**269.6**	**1,467.6**	**262.5**	**31.0**
Offshore Cable Laying/Burying					
Cable Lay Vessel - Main Engines	27.7	83.1	610.6	109.3	12.9
Cable Lay Vessel - Generator	9.2	27.5	202.4	36.2	4.3
Cable Lay Vessel - Generator	6.1	18.2	133.9	24.0	2.8
Subtotal	**42.9**	**128.8**	**946.9**	**169.5**	**19.9**
Vessel Return					
Cable Lay Vessel - Main Engines	7.0	20.9	153.9	27.6	3.2
Cable Lay Vessel - Generator	1.0	3.0	22.3	4.0	0.5
Subtotal	**8.0**	**24.0**	**176.3**	**31.6**	**3.7**
Total Emissions - Pounds	**302**	**2,370**	**3,811**	**558**	**209**

Total Emissions - Tons	**0.15**	**1.18**	**1.91**	**0.28**	**0.10**
Mitigated Total Emissions - Tons (1)	**0.13**	**1.18**	**1.62**	**0.28**	**0.10**
SLOCAPCD Quarterly Thresholds - Tons	**2.50**	**NA**	**2.50**	**NA**	**NA**

Note: (1) Includes use of 2 degree ITR and ARB on-road diesel fuel on all diesel-powered vessels and equipment.

Table E-22. Total Emissions Associated with the Estero Bay Morro Beach Alternative Landing Site to San Luis Obispo Installation Activities.

	Pounds				
Activity/Equipment Type	*ROC*	*CO*	*NOx*	*SO2*	*PM10*
Cable Laying from Caisson to Existing Conduit					
Skip-borer	8.2	19.2	88.9	5.9	6.3
Cable Laying into Existing Conduit					
Winch-Mounted Truck	4.8	13.0	44.4	4.1	3.6
Cable Pulling Winch	15.1	351.0	9.1	0.5	0.6
Subtotal	**19.9**	**363.9**	**53.5**	**4.6**	**4.1**
Cable Trenching along Roads					
Trencher-Mounted Truck	9.6	25.9	88.9	8.2	7.1
Vibratory Trencher	5.4	25.4	54.5	4.6	6.6
Fugitive Dust	0.0	0.0	0.0	0.0	66.0
Subtotal	**15.0**	**51.3**	**143.4**	**12.8**	**79.7**
Cable Hanging on Existing Utility Poles					
Winch-Mounted Truck	13.4	36.3	124.4	11.5	10.0
Cable Pulling Winch	42.2	982.7	25.5	1.3	1.6
Subtotal	**55.7**	**1,019.0**	**149.9**	**12.9**	**11.6**
Caisson Construction					
Backhoe	13.4	330.0	8.0	0.0	0.1
Supply Truck w/ Crane	0.3	0.9	3.2	0.3	0.3
Subtotal	**13.8**	**330.9**	**11.2**	**0.3**	**0.4**
Shore Horizontal Directional Drilling					
Tracked Drill Rig	36.8	86.0	397.5	26.4	28.4
Drilling Mud Unit	37.7	88.2	407.4	27.1	29.1
Work/Dive Boat	2.6	7.8	57.4	10.3	1.2
Subtotal	**77.1**	**182.0**	**862.4**	**63.8**	**58.7**
Cable Landing to Shore					
Cable Lay Vessel - Main Engines	25.2	75.5	555.1	99.4	11.7
Cable Lay Vessel - Generator	15.3	45.9	337.3	60.4	7.1
Cable Lay Vessel - Generator	10.1	30.4	223.2	39.9	4.7
Barge Tugboat	13.3	39.8	292.8	52.4	6.2
Work/Dive Boat	2.6	7.8	57.4	10.3	1.2
Power Winch - Onshore	3.0	70.2	1.8	0.1	0.1
Subtotal	**69.5**	**269.6**	**1,467.6**	**262.5**	**31.0**
Offshore Cable Laying/Burying					
Cable Lay Vessel - Main Engines	23.1	69.2	508.8	91.1	10.7
Cable Lay Vessel - Generator	7.6	22.9	168.6	30.2	3.5
Cable Lay Vessel - Generator	5.1	15.2	111.6	20.0	2.3
Subtotal	**35.8**	**107.3**	**789.1**	**141.2**	**16.6**
Vessel Return					
Cable Lay Vessel - Main Engines	5.8	17.5	128.3	23.0	2.7
Cable Lay Vessel - Generator	0.8	2.5	18.6	3.3	0.4

Subtotal	**6.7**	**20.0**	**146.9**	**26.3**	**3.1**
Total Emissions - Pounds	**302**	**2,363**	**3,713**	**530**	**211**
Total Emissions - Tons	**0.15**	**1.18**	**1.86**	**0.27**	**0.11**
Mitigated Total Emissions - Tons (1)	**0.13**	**1.18**	**1.58**	**0.27**	**0.11**
SLOCAPCD Quarterly Thresholds - Tons	**2.50**	**NA**	**2.50**	**NA**	**NA**

Note: (1) Includes use of 2 degree ITR and ARB on-road diesel fuel on all diesel-powered vessels and equipment.

Table E-23. Total Emissions - All Land Alt - SLOCAPCD

	Tons				
Activity/Equipment Type	*ROC*	*CO*	*NOx*	*SO2*	*PM10*
Cable Laying into Existing Conduit					
Winch-Mounted Truck	0.0	0.0	0.0	0.0	0.0
Cable Pulling Winch	0.0	0.1	0.0	0.0	0.0
Subtotal	**0.0**	**0.1**	**0.0**	**0.0**	**0.0**
Cable Trenching along Roads					
Trencher-Mounted Truck	0.0	0.1	0.3	0.0	0.0
Vibratory Trencher	0.0	0.1	0.2	0.0	0.0
Fugitive Dust	0.0	0.0	0.0	0.0	0.4
Subtotal	**0.0**	**0.1**	**0.4**	**0.0**	**0.4**
Total Emissions - Tons	**0.05**	**0.26**	**0.43**	**0.04**	**0.42**
SLOCAPCD Quarterly Thresholds - Tons	**2.50**	**NA**	**2.50**	**NA**	**NA**

Table E-24. Emission Source Data for Proposed Onshore and State Waters Construction Activities - Manhattan Beach Landing Site.

Activity/Equipment Type	*Horsepower* (Hp)	*Load Factor*	*Number Active*	*Hp-Hrs*	*Gal/ Hour*	*Hours /Day*	*Work Days*	*Total Fuel Usage (Gal)*
Cable Laying into Existing Conduit (1)								
Winch-Mounted Truck	350	0.20	1	70	3.9	6	9	212
Cable Pulling Winch	80	0.50	1	40	4.4	4	9	160
Cable Trenching along Roads (2)								
Trencher-Mounted Truck	350	0.30	1	105	5.9	1	1	6
Vibratory Trencher	100	0.60	1	60	6.7	1	1	7
Fugitive Dust (3)	NA	NA	0.2	NA	NA	NA	1	0.2
Cable Hanging on Existing Utility Poles (4)								
Winch-Mounted Truck	350	0.20	1	70	3.9	6	2	47
Cable Pulling Winch	80	0.50	1	40	4.4	4	2	36
Caisson Construction								
Backhoe	105	0.60	1	63	3.5	6	2	42
Supply Truck w/ Crane	250	0.30	1	75	4.2	2	1	8
Cable Laying from Manhole to Shore								
Skip-borer	200	0.60	1	120	6.7	8	4	215
Shore Horizontal Directional Drilling								
Tracked Drill Rig	460	0.70	1	322	18.0	8	6	866
Drilling Mud Unit	550	0.60	1	330	18.5	8	6	887
Work/Dive Boat	340	0.30	1	102	5.7	12	2	137
Cable Landing to Shore								
Cable Lay Vessel - Main Engines	2,300	0.12	2	552	27.6	24	2	1,325
Cable Lay Vessel - Generator	1,290	0.25	1	323	16.8	24	2	805
Cable Lay Vessel - Generator	970	0.22	1	213	11.1	24	2	533
Barge Tugboat	1,300	0.40	Total Hp	520	29.1	12	2	699
Work/Dive Boat	340	0.30	1	102	5.7	12	2	137
Power Winch - Onshore	100	0.40	1	40	2.2	4	1	9
Offshore Cable Laying/Burying (5)								
Cable Lay Vessel - Main Engines	2,300	0.22	2	1,012	50.6	15	1	759
Cable Lay Vessel - Generator	1,290	0.25	1	323	16.8	15	1	252
Cable Lay Vessel - Generator	970	0.22	1	213	11.1	15	1	166
Vessel Return (6)								
Cable Lay Vessel - Main Engines	2,300	0.64	2	2,944	147.2	1.3	1	191
Cable Lay Vessel - Generator	970	0.44	1	427	22.2	1.3	1	29

Note: (1) Based on an installation rate of 4 miles/day and a total distance of 35.4 miles.

(2) Based on an installation rate of 0.8 miles/day and a total distance of 0.6 miles.

(3) Number active are the average daily acres disturbed on a continuous basis and total fuel usage is the total acres disturbed. The dim the average daily acres disturbed would be 0.1 mile x 20 feet.

(4) Based on an installation rate of 1 mile/day and a total distance of 1.6 miles.

(5) Based on a cruising speed of 1 knot and a cable route of 7.5 nautical miles within state waters.

(6) Based on 2 return trips, a cruising speed of 12 knots, and a cable route of 7.5 nm within state waters.

Table E-25. Emission Source Data for All Land Alt - SCAQMD

Activity/Equipment Type	*Horsepower* (Hp)	*Load Factor*	*Number Active*	*Hp-Hrs*	*Gal/ Hour*	*Hours /Day*	*Work Days*	*Total Hp-Hrs*
Cable Laying into Existing Conduit (1)								
Winch-Mounted Truck	350	0.20	1	70	3.9	6	7	2,940
Cable Pulling Winch	80	0.50	1	40	4.4	4	7	1,120
Cable Trenching along Roads (2)								
Trencher-Mounted Truck	350	0.30	1	105	5.9	4	133	55,860
Vibratory Trencher	100	0.60	1	60	6.7	4	133	31,920
Fugitive Dust (3)	NA	NA	0.24	NA	NA	NA	133	31.9

Note: (1) Based on an installation rate of 4 miles/day and a total distance of 27 miles.

(2) Based on an installation rate of 0.8 miles/day and a total distance of 107 miles.

(3) Number active are the average daily acres disturbed on a continuous basis and total fuel usage is the total acres disturbed. The dim
the average daily acres disturbed would be 0.1 mile x 20 feet.

Table E-26. Daily Emissions for Proposed Onshore and State Waters Construction Activities - Manhattan Beach Site.

Activity/Equipment Type	*Pounds Per Day*				
	ROC	*CO*	*NOx*	*SO2*	*PM10*
Cable Laying into Existing Conduit					
Winch-Mounted Truck	1.0	2.6	8.9	0.8	0.7
Cable Pulling Winch	3.0	70.2	1.8	0.1	0.1
Subtotal	**4.0**	**72.8**	**10.7**	**0.9**	**0.8**
Cable Trenching along Roads					
Trencher-Mounted Truck	0.2	0.6	2.2	0.2	0.2
Vibratory Trencher	0.1	0.6	1.4	0.1	0.2
Fugitive Dust	0.0	0.0	0.0	0.0	11.0
Subtotal	**0.4**	**1.3**	**3.6**	**0.3**	**11.3**
Cable Hanging on Existing Utility Poles					
Winch-Mounted Truck	1.0	2.6	8.9	0.8	0.7
Cable Pulling Winch	3.0	70.2	1.8	0.1	0.1
Subtotal	**4.0**	**72.8**	**10.7**	**0.9**	**0.8**
Caisson Construction					
Backhoe	6.7	165.0	4.0	0.0	0.0
Supply Truck w/ Crane	0.3	0.9	3.2	0.3	0.3
Subtotal	**7.1**	**165.9**	**7.2**	**0.3**	**0.3**
Cable Laying from Manhole to Shore					
Skip-borer	**2.7**	**6.4**	**29.6**	**2.0**	**2.1**
Shore Horizontal Directional Drilling					
Tracked Drill Rig	7.4	17.2	79.5	5.3	5.7
Drilling Mud Unit	7.5	17.6	81.5	5.4	5.8
Work/Dive Boat	1.3	3.9	28.7	5.1	0.6
Subtotal	**16.2**	**38.7**	**189.7**	**15.8**	**12.1**
Cable Landing to Shore					
Cable Lay Vessel - Main Engines	12.6	37.8	277.5	49.7	5.8
Cable Lay Vessel - Generator	7.6	22.9	168.6	30.2	3.5
Cable Lay Vessel - Generator	5.1	15.2	111.6	20.0	2.3
Barge Tugboat	6.6	19.9	146.4	26.2	3.1
Work/Dive Boat	1.3	3.9	28.7	5.1	0.6
Power Winch - Onshore	3.0	70.2	1.8	0.1	0.1
Subtotal	**36.3**	**169.9**	**734.7**	**131.3**	**15.5**
Offshore Cable Laying/Burying					
Cable Lay Vessel - Main Engines	14.4	43.3	318.0	56.9	6.7
Cable Lay Vessel - Generator	4.8	14.3	105.4	18.9	2.2
Cable Lay Vessel - Generator	3.2	9.5	69.7	12.5	1.5
Subtotal	**22.4**	**67.1**	**493.2**	**88.3**	**10.4**
Vessel Return					
Cable Lay Vessel - Main Engines	3.6	10.9	80.2	14.4	1.7
Cable Lay Vessel - Generator	0.5	1.6	12.1	2.2	0.3

Subtotal	**4.2**	**12.6**	**92.3**	**16.5**	**1.9**
SCAQMD Daily Thresholds	**75**	**550**	**100**	**150**	**150**

Note: Peak daily emissions would occur during offshore cable laying/burying. Use of 2 degree ITR and ARB on-road diesel fu
on all diesel-powered vessels and equipment would reduce ROC/NOx emissions by 16/15%.

Table E-27. Total Emissions for Proposed Onshore and State Waters Construction Activities - Manhattan Beach Site.

	Pounds				
Activity/Equipment Type	*ROC*	*CO*	*NOx*	*SO2*	*PM10*
Cable Laying into Existing Conduit					
Winch-Mounted Truck	8.6	23.3	80.0	7.4	6.4
Cable Pulling Winch	27.2	631.7	16.4	0.9	1.0
Subtotal	**35.8**	**655.1**	**96.4**	**8.3**	**7.4**
Cable Trenching along Roads					
Trencher-Mounted Truck	0.2	0.6	2.2	0.2	0.2
Vibratory Trencher	0.1	0.6	1.4	0.1	0.2
Fugitive Dust	0.0	0.0	0.0	0.0	11.0
Subtotal	**0.4**	**1.3**	**3.6**	**0.3**	**11.3**
Cable Hanging on Existing Utility Poles					
Winch-Mounted Truck	1.9	5.2	17.8	1.6	1.4
Cable Pulling Winch	6.0	140.4	3.6	0.2	0.2
Subtotal	**8.0**	**145.6**	**21.4**	**1.8**	**1.7**
Caisson Construction					
Backhoe	13.4	330.0	8.0	0.0	0.1
Supply Truck w/ Crane	0.3	0.9	3.2	0.3	0.3
Subtotal	**13.8**	**330.9**	**11.2**	**0.3**	**0.4**
Cable Laying from Manhole to Shore					
Skip-borer	**11.0**	**25.7**	**118.5**	**7.9**	**8.5**
Shore Horizontal Directional Drilling					
Tracked Drill Rig	44.2	103.2	477.0	31.7	34.1
Drilling Mud Unit	45.3	105.8	488.9	32.5	34.9
Work/Dive Boat	2.6	7.8	57.4	10.3	1.2
Subtotal	**92.0**	**216.9**	**1,023.4**	**74.5**	**70.2**
Cable Landing to Shore					
Cable Lay Vessel - Main Engines	25.2	75.5	555.1	99.4	11.7
Cable Lay Vessel - Generator	15.3	45.9	337.3	60.4	7.1
Cable Lay Vessel - Generator	10.1	30.4	223.2	39.9	4.7
Barge Tugboat	13.3	39.8	292.8	52.4	6.2
Work/Dive Boat	2.6	7.8	57.4	10.3	1.2
Power Winch - Onshore	3.0	70.2	1.8	0.1	0.1
Subtotal	**69.5**	**269.6**	**1,467.6**	**262.5**	**31.0**
Offshore Cable Laying/Burying					
Cable Lay Vessel - Main Engines	14.4	43.3	318.0	56.9	6.7
Cable Lay Vessel - Generator	4.8	14.3	105.4	18.9	2.2
Cable Lay Vessel - Generator	3.2	9.5	69.7	12.5	1.5
Subtotal	**22.4**	**67.1**	**493.2**	**88.3**	**10.4**
Vessel Return					
Cable Lay Vessel - Main Engines	3.6	10.9	80.2	14.4	1.7
Cable Lay Vessel - Generator	0.5	1.6	12.1	2.2	0.3

Subtotal	**4.2**	**12.6**	**92.3**	**16.5**	**1.9**
Total Emissions - Pounds	**257**	**1,725**	**3,327**	**460**	**143**
Total Emissions - Tons	**0.13**	**0.86**	**1.66**	**0.23**	**0.07**
Mitigated Total Emissions - Tons (1)	**0.11**	**0.86**	**1.41**	**0.23**	**0.07**
SCAQMD Quarterly Thresholds - Tons	**2.50**	**24.75**	**2.50**	**6.75**	**6.75**

Note: (1) Includes use of 2 degree ITR and ARB on-road diesel fuel on all diesel-powered vessels and equipment.

Table E-28. Total Emissions - All Land Alt - SCAQMD

	Tons				
Activity/Equipment Type	*ROC*	*CO*	*NOx*	*SO2*	*PM10*
Cable Laying into Existing Conduit					
Winch-Mounted Truck	0.0	0.0	0.0	0.0	0.0
Cable Pulling Winch	0.0	0.2	0.0	0.0	0.0
Subtotal	**0.0**	**0.3**	**0.0**	**0.0**	**0.0**
Cable Trenching along Roads					
Trencher-Mounted Truck	0.1	0.2	0.6	0.1	0.0
Vibratory Trencher	0.0	0.2	0.4	0.0	0.0
Fugitive Dust	0.0	0.0	0.0	0.0	0.9
Subtotal	**0.1**	**0.3**	**1.0**	**0.1**	**1.0**
Total Emissions - Tons	**0.11**	**0.60**	**0.99**	**0.09**	**0.97**
SCAQMD Quarterly Thresholds - Tons	**2.50**	**24.75**	**2.50**	**6.75**	**6.75**

Table E-29. Emission Source Data for Proposed Onshore and State Waters Construction Activities - San Diego Primary Landing Site.

Activity/Equipment Type	*Horsepower* (Hp)	*Load Factor*	*Number Active*	*Hp-Hrs*	*Gal/ Hour*	*Hours /Day*	*Work Days*	*Total Fuel Usage (Gal)*
Cable Laying into Existing Conduit (1)								
Winch-Mounted Truck	350	0.20	1	70	3.9	6	3	71
Cable Pulling Winch	80	0.50	1	40	4.4	4	3	53
Cable Trenching along Roads (2)								
Trencher-Mounted Truck	350	0.30	1	105	5.9	1	0.5	3
Vibratory Trencher	100	0.60	1	60	6.7	1	0.5	3
Fugitive Dust (3)	NA	NA	0.2	NA	NA	NA	0.5	0.2
Caisson Construction								
Backhoe	105	0.60	1	63	3.5	6	2	42
Supply Truck w/ Crane	250	0.30	1	75	4.2	2	1	8
Shore Horizontal Directional Drilling								
Tracked Drill Rig	460	0.70	1	322	18.0	8	5	721
Drilling Mud Unit	550	0.60	1	330	18.5	8	5	739
Work/Dive Boat	340	0.30	1	102	5.7	12	2	137
Cable Landing to Shore								
Cable Lay Vessel - Main Engines	2,300	0.12	2	552	27.6	24	2	1,325
Cable Lay Vessel - Generator	1,290	0.25	1	323	16.8	24	2	805
Cable Lay Vessel - Generator	970	0.22	1	213	11.1	24	2	533
Barge Tugboat	1,300	0.40	Total Hp	520	29.1	12	2	699
Work/Dive Boat	340	0.30	1	102	5.7	12	2	137
Power Winch - Onshore	100	0.40	1	40	2.2	4	1	9
Offshore Cable Laying/Burying (4)								
Cable Lay Vessel - Main Engines	2,300	0.22	2	1,012	50.6	7	1	354
Cable Lay Vessel - Generator	1,290	0.25	1	323	16.8	7	1	117
Cable Lay Vessel - Generator	970	0.22	1	213	11.1	7	1	78
Vessel Return (5)								
Cable Lay Vessel - Main Engines	2,300	0.64	2	2,944	153.1	0.6	1	92
Cable Lay Vessel - Generator	970	0.44	1	427	22.2	0.6	1	13

Note: (1) Based on an installation rate of 4 miles/day and a total distance of 10.9 miles.

(2) Based on an installation rate of 0.8 miles/day and a total distance of 0.4 miles.

(3) Number active are the average daily acres disturbed on a continuous basis and total fuel usage is the total acres disturbed. The dimensions of this area would be 0.4 mile x 20 feet.

(4) Based on a cruising speed of 1 knot and a cable route of 3.5 nautical miles within state waters.

(5) Based on 2 return trips, a cruising speed of 12 knots, and a cable route of 3.5 nm within state waters.

Table E-30. Emission Source Data for Proposed Onshore and State Waters Construction Activities - San Diego Alternative Landing Site.

Activity/Equipment Type	*Horsepower* (Hp)	*Load Factor*	*Number Active*	*Hp-Hrs*	*Gal/ Hour*	*Hours /Day*	*Work Days*	*Total Fuel Usage (Gal)*
Cable Laying into Existing Conduit (1)								
Winch-Mounted Truck	350	0.20	1	70	3.9	6	3	71
Cable Pulling Winch	80	0.50	1	40	4.4	4	3	53
Cable Trenching within Railroad ROW (2)								
Trencher	300	0.50	2	300	15.0	8	5	600
Supply Truck	350	0.20	1	70	3.9	4	5	78
Fugitive Dust (3)	NA	NA	1	NA	NA	NA	5	5
Cable Trenching along Roads (4)								
Trencher-Mounted Truck	350	0.30	1	105	5.9	1	0.5	3
Vibratory Trencher	100	0.60	1	60	6.7	1	0.5	3
Fugitive Dust (3)	NA	NA	0.2	NA	NA	NA	0.5	0.2
Caisson Construction								
Backhoe	105	0.60	1	63	3.5	6	2	42
Supply Truck w/ Crane	250	0.30	1	75	4.2	2	1	8
Shore Horizontal Directional Drilling								
Tracked Drill Rig	460	0.70	1	322	18.0	8	5	721
Drilling Mud Unit	550	0.60	1	330	18.5	8	5	739
Work/Dive Boat	340	0.30	1	102	5.7	12	2	137
Cable Landing to Shore								
Cable Lay Vessel - Main Engines	2,300	0.12	2	552	27.6	24	2	1,325
Cable Lay Vessel - Generator	1,290	0.25	1	323	16.8	24	2	805
Cable Lay Vessel - Generator	970	0.22	1	213	11.1	24	2	533
Barge Tugboat	1,300	0.40	Total Hp	520	29.1	12	2	699
Work/Dive Boat	340	0.30	1	102	5.7	12	2	137
Power Winch - Onshore	100	0.40	1	40	2.2	4	1	9
Offshore Cable Laying/Burying (5)								
Cable Lay Vessel - Main Engines	2,300	0.22	2	1,012	50.6	8	1	405
Cable Lay Vessel - Generator	1,290	0.25	1	323	16.8	8	1	134
Cable Lay Vessel - Generator	970	0.22	1	213	11.1	8	1	89
Vessel Return (6)								
Cable Lay Vessel - Main Engines	2,300	0.64	2	2,944	153.1	0.7	1	107
Cable Lay Vessel - Generator	970	0.44	1	427	22.2	0.7	1	16

Note: (1) Based on an installation rate of 4 miles/day and a total distance of 10.9 miles.

(2) Based on an installation rate of 3 miles/day and a total distance of 14.7 miles.

(3) Number active are the average daily acres disturbed on a continuous basis and total fuel usage is the total acres disturbed. The dimensions of this area would be 0.4 mile x 20 feet.

(4) Based on an installation rate of 0.8 miles/day and a total distance of 0.4 miles.

(5) Based on a cruising speed of 1 knot and a cable route of 4 nautical miles within state waters.

(6) Based on 2 return trips, a cruising speed of 12 knots, and a cable route of 4 nm within state waters.

Table E-31. Emission Source Data for All Land Alt - SDCAPCD

Activity/Equipment Type	*Horsepower* (Hp)	*Load Factor*	*Number Active*	*Hp-Hrs*	*Gal/ Hour*	*Hours /Day*	*Work Days*	*Total Hp-Hrs*
Cable Laying into Existing Conduit (1)								
Winch-Mounted Truck	350	0.20	1	70	3.9	6	3	1,260
Cable Pulling Winch	80	0.50	1	40	4.4	4	3	480
Cable Trenching along Roads (2)								
Trencher-Mounted Truck	350	0.30	1	105	5.9	4	44	18,480
Vibratory Trencher	100	0.60	1	60	6.7	4	44	10,560
Fugitive Dust (3)	NA	NA	0.24	NA	NA	NA	44	10.6

Note: (1) Based on an installation rate of 4 miles/day and a total distance of 9 miles.

(2) Based on an installation rate of 0.8 miles/day and a total distance of 35 miles.

(3) Number active are the average daily acres disturbed on a continuous basis and total fuel usage is the total acres disturbed. The di
the average daily acres disturbed would be 0.1 mile x 20 feet.

Table E-32. Daily Emissions for Proposed Onshore and State Waters Construction Activities - San Diego Primary Landing Site.

Activity/Equipment Type	*Pounds Per Day*				
	ROC	*CO*	*NOx*	*SO2*	*PM10*
Cable Laying into Existing Conduit					
Winch-Mounted Truck	1.0	2.6	8.9	0.8	0.7
Cable Pulling Winch	3.0	70.2	1.8	0.1	0.1
Subtotal	**4.0**	**72.8**	**10.7**	**0.9**	**0.8**
Cable Trenching within Railroad ROW					
Trencher-Mounted Truck	0.2	0.6	2.2	0.2	0.2
Vibratory Trencher	0.1	0.6	1.4	0.1	0.2
Fugitive Dust	0.0	0.0	0.0	0.0	11.0
Trencher-Mounted Truck	**0.4**	**1.3**	**3.6**	**0.3**	**11.3**
Vibratory Trencher					
Backhoe	6.7	165.0	4.0	0.0	0.0
Supply Truck w/ Crane	0.3	0.9	3.2	0.3	0.3
Subtotal	**7.1**	**165.9**	**7.2**	**0.3**	**0.3**
Shore Horizontal Directional Drilling					
Tracked Drill Rig	7.4	17.2	79.5	5.3	5.7
Drilling Mud Unit	7.5	17.6	81.5	5.4	5.8
Work/Dive Boat	1.3	3.9	28.7	5.1	0.6
Subtotal	**16.2**	**38.7**	**189.7**	**15.8**	**12.1**
Cable Landing to Shore					
Cable Lay Vessel - Main Engines	12.6	37.8	277.5	49.7	5.8
Cable Lay Vessel - Generator	7.6	22.9	168.6	30.2	3.5
Cable Lay Vessel - Generator	5.1	15.2	111.6	20.0	2.3
Barge Tugboat	6.6	19.9	146.4	26.2	3.1
Work/Dive Boat	1.3	3.9	28.7	5.1	0.6
Power Winch - Onshore	3.0	70.2	1.8	0.1	0.1
Subtotal	**36.3**	**169.9**	**734.7**	**131.3**	**15.5**
Offshore Cable Laying/Burying					
Cable Lay Vessel - Main Engines	6.7	20.2	148.4	26.6	3.1
Cable Lay Vessel - Generator	2.2	6.7	49.2	8.8	1.0
Cable Lay Vessel - Generator	1.5	4.4	32.5	5.8	0.7
Subtotal	**10.4**	**31.3**	**230.1**	**41.2**	**4.8**
Vessel Return					
Cable Lay Vessel - Main Engines	1.7	5.2	38.5	6.9	0.8
Cable Lay Vessel - Generator	0.3	0.8	5.6	1.0	0.1
Subtotal	**2.0**	**6.0**	**44.1**	**7.9**	**0.9**

Note: Peak daily emissions would occur during cable landing to shore.

Table E-33. Daily Emissions for Proposed Onshore and State Waters Construction Activities - San Diego Alternate Landing Site.

Activity/Equipment Type	*Pounds Per Day*				
	ROC	*CO*	*NOx*	*SO2*	*PM10*
Cable Laying into Existing Conduit					
Winch-Mounted Truck	1.0	2.6	8.9	0.8	0.7
Cable Pulling Winch	3.0	70.2	1.8	0.1	0.1
Subtotal	**4.0**	**72.8**	**10.7**	**0.9**	**0.8**
Cable Trenching within Railroad ROW					
Trencher	5.4	25.4	54.5	4.6	6.6
Supply Truck	0.6	1.7	5.9	0.5	0.5
Fugitive Dust	0.0	0.0	0.0	0.0	55.0
Subtotal	**6.1**	**27.1**	**60.4**	**5.1**	**62.0**
Cable Trenching along Roads					
Trencher-Mounted Truck	0.2	0.6	2.2	0.2	0.2
Vibratory Trencher	0.1	0.6	1.4	0.1	0.2
Fugitive Dust	0.0	0.0	0.0	0.0	11.0
Subtotal	**0.4**	**1.3**	**3.6**	**0.3**	**11.3**
Caisson Construction					
Backhoe	6.7	165.0	4.0	0.0	0.0
Supply Truck w/ Crane	0.3	0.9	3.2	0.3	0.3
Subtotal	**7.1**	**165.9**	**7.2**	**0.3**	**0.3**
Shore Horizontal Directional Drilling					
Tracked Drill Rig	7.4	17.2	79.5	5.3	5.7
Drilling Mud Unit	7.5	17.6	81.5	5.4	5.8
Work/Dive Boat	1.3	3.9	28.7	5.1	0.6
Subtotal	**16.2**	**38.7**	**189.7**	**15.8**	**12.1**
Cable Landing to Shore					
Cable Lay Vessel - Main Engines	12.6	37.8	277.5	49.7	5.8
Cable Lay Vessel - Generator	7.6	22.9	168.6	30.2	3.5
Cable Lay Vessel - Generator	5.1	15.2	111.6	20.0	2.3
Barge Tugboat	6.6	19.9	146.4	26.2	3.1
Work/Dive Boat	1.3	3.9	28.7	5.1	0.6
Power Winch - Onshore	3.0	70.2	1.8	0.1	0.1
Subtotal	**36.3**	**169.9**	**734.7**	**131.3**	**15.5**
Offshore Cable Laying/Burying					
Cable Lay Vessel - Main Engines	7.7	23.1	169.6	30.4	3.6
Cable Lay Vessel - Generator	2.5	7.6	56.2	10.1	1.2
Cable Lay Vessel - Generator	1.7	5.1	37.2	6.7	0.8
Subtotal	**11.9**	**35.8**	**263.0**	**47.1**	**5.5**
Vessel Return					
Cable Lay Vessel - Main Engines	2.0	6.1	44.9	8.0	0.9
Cable Lay Vessel - Generator	0.3	0.9	6.5	1.2	0.1
Subtotal	**2.3**	**7.0**	**51.4**	**9.2**	**1.1**

Note: Peak daily emissions would occur during cable landing to shore.

Table E-34. Total Emissions for Proposed Onshore and State Waters Construction Activities - San Diego Primary Landing Site.

Activity/Equipment Type	*Total Pounds*				
	ROC	*CO*	*NOx*	*SO2*	*PM10*
Cable Laying into Existing Conduit					
Winch-Mounted Truck	2.9	7.8	26.7	2.5	2.1
Cable Pulling Winch	9.1	210.6	5.5	0.3	0.3
Subtotal	**11.9**	**218.4**	**32.1**	**2.8**	**2.5**
Cable Trenching within Railroad ROW					
Trencher-Mounted Truck	0.1	0.3	1.1	0.1	0.1
Vibratory Trencher	0.1	0.3	0.7	0.1	0.1
Fugitive Dust	0.0	0.0	0.0	0.0	11.0
Subtotal	**0.2**	**0.6**	**1.8**	**0.2**	**11.2**
Caisson Construction					
Backhoe	13.4	330.0	8.0	0.0	0.1
Supply Truck w/ Crane	0.3	0.9	3.2	0.3	0.3
Subtotal	**13.8**	**330.9**	**11.2**	**0.3**	**0.4**
Shore Horizontal Directional Drilling					
Tracked Drill Rig	36.8	86.0	397.5	26.4	28.4
Drilling Mud Unit	37.7	88.2	407.4	27.1	29.1
Work/Dive Boat	2.6	7.8	57.4	10.3	1.2
Subtotal	**77.1**	**182.0**	**862.4**	**63.8**	**58.7**
Cable Landing to Shore					
Cable Lay Vessel - Main Engines	25.2	75.5	555.1	99.4	11.7
Cable Lay Vessel - Generator	15.3	45.9	337.3	60.4	7.1
Cable Lay Vessel - Generator	10.1	30.4	223.2	39.9	4.7
Barge Tugboat	13.3	39.8	292.8	52.4	6.2
Work/Dive Boat	2.6	7.8	57.4	10.3	1.2
Power Winch - Onshore	3.0	70.2	1.8	0.1	0.1
Subtotal	**69.5**	**269.6**	**1,467.6**	**262.5**	**31.0**
Offshore Cable Laying/Burying					
Cable Lay Vessel - Main Engines	6.7	20.2	148.4	26.6	3.1
Cable Lay Vessel - Generator	2.2	6.7	49.2	8.8	1.0
Cable Lay Vessel - Generator	1.5	4.4	32.5	5.8	0.7
Subtotal	**10.4**	**31.3**	**230.1**	**41.2**	**4.8**
Vessel Return					
Cable Lay Vessel - Main Engines	1.7	5.2	38.5	6.9	0.8
Cable Lay Vessel - Generator	0.3	0.8	5.6	1.0	0.1
Subtotal	**2.0**	**6.0**	**44.1**	**7.9**	**0.9**
Total Emissions - Pounds	**185**	**1,039**	**2,649**	**379**	**109**
Total Emissions - Tons	**0.09**	**0.52**	**1.32**	**0.19**	**0.05**
Annual Emission Thresholds - Tons	**50**	**100**	**50**	**100**	**100**

Note: All emissions would occur within one calendar year.

Table E-35. Total Emissions for Proposed Onshore and State Waters Construction Activities - San Diego Alternate Landing Site.

Activity/Equipment Type	*Total Pounds*				
	ROC	*CO*	*NOx*	*SO2*	*PM10*
Cable Laying into Existing Conduit					
Winch-Mounted Truck	2.9	7.8	26.7	2.5	2.1
Cable Pulling Winch	9.1	210.6	5.5	0.3	0.3
Subtotal	**11.9**	**218.4**	**32.1**	**2.8**	**2.5**
Cable Trenching within Railroad ROW					
Trencher	27.1	127.0	272.5	22.8	32.8
Supply Truck	3.2	8.6	29.6	2.7	2.4
Fugitive Dust	0.0	0.0	0.0	0.0	275.0
Subtotal	**30.3**	**135.6**	**302.1**	**25.5**	**310.1**
Cable Trenching along Roads					
Trencher-Mounted Truck	0.1	0.3	1.1	0.1	0.1
Vibratory Trencher	0.1	0.3	0.7	0.1	0.1
Fugitive Dust	0.0	0.0	0.0	0.0	11.0
Subtotal	**0.2**	**0.6**	**1.8**	**0.2**	**11.2**
Caisson Construction					
Backhoe	13.4	330.0	8.0	0.0	0.1
Supply Truck w/ Crane	0.3	0.9	3.2	0.3	0.3
Subtotal	**13.8**	**330.9**	**11.2**	**0.3**	**0.4**
Shore Horizontal Directional Drilling					
Tracked Drill Rig	36.8	86.0	397.5	26.4	28.4
Drilling Mud Unit	37.7	88.2	407.4	27.1	29.1
Work/Dive Boat	2.6	7.8	57.4	10.3	1.2
Subtotal	**77.1**	**182.0**	**862.4**	**63.8**	**58.7**
Cable Landing to Shore					
Cable Lay Vessel - Main Engines	25.2	75.5	555.1	99.4	11.7
Cable Lay Vessel - Generator	15.3	45.9	337.3	60.4	7.1
Cable Lay Vessel - Generator	10.1	30.4	223.2	39.9	4.7
Barge Tugboat	13.3	39.8	292.8	52.4	6.2
Work/Dive Boat	2.6	7.8	57.4	10.3	1.2
Power Winch - Onshore	3.0	70.2	1.8	0.1	0.1
Subtotal	**69.5**	**269.6**	**1,467.6**	**262.5**	**31.0**
Offshore Cable Laying/Burying					
Cable Lay Vessel - Main Engines	7.7	23.1	169.6	30.4	3.6
Cable Lay Vessel - Generator	2.5	7.6	56.2	10.1	1.2
Cable Lay Vessel - Generator	1.7	5.1	37.2	6.7	0.8
Subtotal	**11.9**	**35.8**	**263.0**	**47.1**	**5.5**
Vessel Return					
Cable Lay Vessel - Main Engines	2.0	6.1	44.9	8.0	0.9
Cable Lay Vessel - Generator	0.3	0.9	6.5	1.2	0.1
Subtotal	**2.3**	**7.0**	**51.4**	**9.2**	**1.1**

Total Emissions - Pounds	**217**	**1,180**	**2,992**	**411**	**420**
Total Emissions - Tons	**0.11**	**0.59**	**1.50**	**0.21**	**0.21**
Annual Emission Thresholds - Tons	**50**	**100**	**50**	**100**	**100**

Note: All emissions would occur within one calendar year.

Table E-36. Total Emissions - All Land Alt - SDCAPCD

	Tons				
Activity/Equipment Type	*ROC*	*CO*	*NOx*	*SO2*	*PM10*
Cable Laying into Existing Conduit					
Winch-Mounted Truck	0.0	0.0	0.0	0.0	0.0
Cable Pulling Winch	0.0	0.1	0.0	0.0	0.0
Subtotal	**0.0**	**0.1**	**0.0**	**0.0**	**0.0**
Cable Trenching along Roads					
Trencher-Mounted Truck	0.0	0.1	0.2	0.0	0.0
Vibratory Trencher	0.0	0.1	0.1	0.0	0.0
Fugitive Dust	0.0	0.0	0.0	0.0	0.3
Subtotal	**0.0**	**0.1**	**0.3**	**0.0**	**0.3**
Total Emissions - Tons	**0.04**	**0.22**	**0.33**	**0.03**	**0.32**
Annual Emission Thresholds - Tons	**50**	**100**	**50**	**100**	**100**

Note: All emissions would occur within one calendar year.